

Please amend the claims as follows:

Claim 1 (Original): A separator especially for lithium high energy batteries, comprising a sheetlike flexible substrate having a multiplicity of openings and having a porous inorganic coating on and in said substrate, the material of said substrate being selected from a nonwoven of electrically nonconductive polymeric fibers, characterized in that the separator has a weight of less than 50 g/m² and a thickness of less than 35 µm and in that the porous inorganic coating is constructed from oxide particles having a primary particle size of from 5 to 100 nm and adhered via SiO₂ or ZrO₂.

Claim 2 (Currently Amended): The separator of claim 1, ~~characterized in that it~~ wherein said separator has a weight of less than 20 g/m².

Claim 3 (Currently Amended): The separator of ~~either of claims 1 and 2 characterized~~ in that claim 1 wherein said polymeric fibers are selected from fibers of polyacrylonitrile, polyester and/or polyolefin.

Claim 4 (Currently Amended): The separator of ~~at least one of claims 1 to 3,~~ characterized in that claim 1 wherein said polymeric fibers are from 0.1 to 10 µm in diameter.

Claim 5 (Currently Amended): The separator of ~~at least one of claims 1 to 4,~~ characterized in that claim 1 wherein said flexible substrate has a porosity of from 50% to 97%.

Claim 6 (Currently Amended): The separator of ~~at least one of claims 1 to 5~~, characterized in that claim 1 wherein said flexible substrate is less than 30 μm in thickness.

Claim 7 (Currently Amended): The separator of claim 6, characterized in that wherein said nonwoven is less than 20 g/m^2 in weight.

Claim 8 (Currently Amended): The separator of ~~any of claims 1 to 7~~, characterized in that claim 1 wherein said coating on and in said substrate comprises an oxide of the metals Al, Zr and/or Si.

Claim 9 (Currently Amended): The separator of ~~at least one of claims 1 to 8~~, characterized in that it claim 1 wherein said separator has a porosity of from 30% to 80%.

Claim 10 (Currently Amended): The separator of ~~at least one of claims 1 to 9~~, characterized in that it claim 1 wherein said separator has a breaking strength of more than 1 N/cm.

Claim 11 (Currently Amended): The separator of ~~at least one of claims 1 to 10~~, characterized in that it claim 1 wherein said separator is bendable around a radius down to 100 m without damage.

Claim 12 (Currently Amended): The separator of ~~at least one of claims 1 to 11~~, characterized in that it claim 1 wherein said separator is bendable around a radius down to 0.5 mm without damage.

Claim 13 (Currently Amended): A process for producing a separator as claimed in at least one of claims 1 to 12, characterized in that in claim 1 wherein said process comprises providing a sheetlike flexible substrate having a multiplicity of openings with a coating on and in said substrate, the material of said substrate being selected from nonwovens less than 30 μm in thickness of electrically nonconductive fibers of polymers and said coating being a porous electrically insulating ceramic coating which is prepared by applying a suspension to said substrate and heating one or more times to solidify said suspension on and in said substrate, the suspension being obtained by suspending metal oxide particles of at least one oxide of the elements Al, Zr and/or Si, which have a primary particle size of from 5 to 100 nm, in a sol of at least one of the elements Si and/or Zr.

Claim 14 (Currently Amended): The process of claim 13, characterized in that wherein said fibers are selected from the group consisting of polyacrylonitrile, polyester, or polyolefin and mixtures thereof.

Claim 15 (Currently Amended): The process of either of claims 13 and 14, characterized in that claim 13 wherein said suspension is brought onto and into said substrate by printing on, pressing on, pressing in, rolling on, knifecoating on, spreadcoating on, dipping, spraying or pouring on.

Claims 16 (Currently Amended): The process of any of claims 13 to 15, characterized in that claim 13 wherein said sol is prepared by hydrolyzing at least one alkoxide compound of the elements Zr, Al and/or Si or at least one nitrate, carbonate or halide of the elements Zr, Al and/or Si.

Claim 17 (Currently Amended): The process of ~~at least one of claims 13 to 16,~~ characterized in that claim 13 wherein metal oxide particles having an average primary particle size of from 7 to 50 nm are suspended.

Claim 18 (Currently Amended): The process of ~~at least one of claims 13 to 17,~~ characterized in that claim 13 wherein the mass fraction of said suspended component is from 1 to 100 times that of the sol used.

Claim 19 (Currently Amended): The process of ~~at least one of claims 13 to 18,~~ characterized in that claim 13 wherein said suspension present on and in said support is solidified by heating at from 150 to 500 °C.

Claim 20 (Currently Amended): The process of claim 19, characterized in that wherein said heating is effected at from 200 to 280 °C for from 0.5 to 10 minutes.

Claim 21 (Canceled)

Claim 22 (Currently Amended): A battery comprising a separator as claimed in ~~at least one of claims 1 to 12~~ claim 1.

Claim 23 (New): The battery as claimed in claim 22 wherein said battery is a lithium high energy battery.

Claim 24 (New): A method of separating components in a battery comprising utilizing the separator as claimed in claim 1.

Claim 25 (New): The method as claimed in claim 24 wherein said battery is a lithium battery.

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